

**Amendments to the Claims:**

Claims 1-10 (Cancelled).

11. (Currently Amended) A method for measuring ultrahigh vacuum, the method comprising the steps of:

(a) ~~providing an ultrahigh vacuum cold cathode pressure gauge comprising any one of a magnetron pressure gauge or a Penning pressure gauge;~~

~~[(b)] (a) subjecting [[the]] an ultrahigh-vacuum cold cathode pressure gauge to a magnetic field of between about 0.05 tesla (T) and about 1.5 tesla (T);~~

~~[(c)] (b) applying in a substantially linear with time increasing manner a voltage on increasing voltages of from between about 1 kV and 12 kV to an anode of the ultrahigh-vacuum cold cathode pressure gauge from between about 1 kV and 12 kV;~~

~~[(d)] (c) measuring [[an]] anode current currents corresponding to the applied voltage voltages;~~

~~(e) storing the measured current and corresponding applied voltage values;~~

~~[(f)] (d) determining [[the]] a maximum current and the corresponding applied voltage values from the measured currents stored values; and~~

~~[(g)] (e) setting the voltage [[on]] applied to the anode to the level, to the corresponding applied voltage at which the current is substantially at its maximum value; and,~~

~~(h) storing the voltage, at which the current is substantially at its maximum value in a database as the optimal voltage for a given pressure to be used as calibration.~~

12. (Currently Amended) A device for measuring ultrahigh vacuum, the device comprising:

- (a) an ultrahigh-vacuum cold cathode pressure gauge comprising any one of a magnetron pressure gauge or a Penning pressure gauge, where said ultrahigh-vacuum cold cathode pressure gauge in the ultrahigh-vacuum cold cathode pressure gauge is configured to be capable of being subjected to a magnetic field of between about 0.05 tesla (T) and about 1.5 tesla (T);
- (b) a voltage-source configured to be capable of providing between about 1 kV and 12 kV, said voltage source being in electrical communication with an anode of the ultrahigh-vacuum cold cathode pressure gauge;
- (c) a controller configured to be capable of controlling that controls the voltage-source so that the to a voltage source is capable of providing applied to the anode a voltage comprises increasing voltages of between about 1 kV and about 12 kV applied in a substantially linear with time increasing manner;
- (d) an ammeter configured to be capable of measuring that measures and storing values of an anode current corresponding to the applied voltages provided voltage;
- (e) a means for determining [[the]] a maximum current and the corresponding applied voltage values from the stored values; and
- (f) a means for setting the applied voltage [on] to the corresponding applied voltage the anode to the level at which the current is substantially at its maximum value; and

(g) ~~a means for storing the voltage, at which the current is substantially at its maximum value as the optimal voltage for a given pressure to be used as calibration.~~

13. (New) A device for measuring ultrahigh vacuum, the device comprising:
  - (a) an ultrahigh-vacuum cold cathode pressure gauge comprising a Penning pressure gauge, where said ultrahigh-vacuum cold cathode pressure gauge in the ultrahigh-vacuum cold cathode pressure gauge is configured to be subjected to a magnetic field of between about 0.05 tesla (T) and about 1.5 tesla (T);
  - (b) a voltage-source in electrical communication with an anode of the ultrahigh-vacuum cold cathode pressure gauge;
  - (c) a controller that controls the voltage-source so that a voltage applied to the anode comprises increasing voltages of between about 1 kV and about 12 kV applied in a substantially linear manner;
  - (d) an ammeter that measures anode currents corresponding to the applied voltages;
  - (e) a means for determining a maximum current and the corresponding applied voltage; and
  - (f) a means for setting the applied voltage to the corresponding applied voltage at which the current is substantially at its maximum.

14. (New) The method according to Claim 11, wherein the ultrahigh vacuum ranges from about  $10^{-12}$  to about  $10^{-6}$  millibar (mbar).

15. (New) The method according to Claim 11, wherein the ultrahigh vacuum ranges from about  $10^{-8}$  to about  $10^{-6}$  millibar (mbar).

16. (New) The method according to Claim 11, wherein the ultrahigh-vacuum cold cathode pressure gauge comprises a magnetron pressure gauge.

17. (New) The method according to Claim 11, wherein the ultrahigh-vacuum cold cathode pressure gauge comprises a Penning pressure gauge.

18. (New) The device according to Claim 12, wherein the ultrahigh vacuum ranges from about  $10^{-12}$  to about  $10^{-6}$  millibar (mbar).

19. (New) The device according to Claim 12, wherein the ultrahigh vacuum ranges from about  $10^{-8}$  to about  $10^{-6}$  millibar (mbar).

20. (New) The device according to Claim 13, wherein the ultrahigh vacuum ranges from about  $10^{-12}$  to about  $10^{-6}$  millibar (mbar).

21. (New) The device according to Claim 13, wherein the ultrahigh vacuum ranges from about  $10^{-8}$  to about  $10^{-6}$  millibar (mbar).